

United States Government
Department of Energy

memorandum

DATE: May 17, 2004

REPLY TO

ATTN OF: SC-10

SUBJECT: CENTER FOR NANOPHASE MATERIALS SCIENCES STATUS REVIEW

TO: Daniel R. Lehman, Director, SC-81

I would like to request that you organize and lead an Office of Science (SC) status review of the Center for Nanophase Materials Sciences (CNMS) project in Oak Ridge, TN, from July 20th - July 22, 2004. The purpose of this review is to evaluate progress in all aspects of the project: technical, cost, schedule, management, and Environmental Safety and Health (ES&H).

The CNMS project received Critical Decision 3 (Approve Start of Construction) on February 3, 2003. The groundbreaking ceremony took place on July 18, 2004. Erection of structural steel for the building is forecast for completion in April 2004, siding is progressing, and technical equipment purchase requests are being prepared. Procurement of the E-beam lithography tool and 2 other major items of technical equipments the 4-probe Scanning Electron Microscope (SEM) and the High Resolution Spin Polarized Scanning Electron Microscope (SEMPA) are proceeding, with the SEM award finally forecasted for May 2004. Cleanroom construction is forecasted for completion in January 2005. Full construction and beneficial occupancy for the building is forecast for April 2005 (Critical Decision 4a, Start of Operations). Based on progress to date, comments from the November 2002 Department of Energy (DOE) Independent Project Review, and the project schedule completion date of September 2006, the committee should devote special attention to issues regarding site and schedule risks, cost and schedule management, contingency management, and documentation of construction, equipment, procedures, and baseline changes. Special issues concern shortages in both steel and electrical commodities.

In carrying out its charge, the review committee is requested to consider the following questions:

1. Are the project's cost, schedule, and technical baselines consistent with those in the FY2005 Project Data Sheet and the current DOE-approved CNMS Project Execution Plan, and is there adequate progress to meet the baseline objectives? Is the information in the DOE Project Assessment Reporting System consistent with physical progress?
2. Is the project being managed as needed for its proper execution?
3. Is there adequate contingency (cost and schedule) to address the risks inherent in the remaining work and is it being properly managed? Is the contingency supported by and consistent with an appropriate project-wide risk analysis?
4. Are ES&H aspects being properly addressed given the project's current stage of development? Are Integrated Safety Management Principles being followed?
5. Has the project responded appropriately to recommendations from prior DOE/SC reviews?

Kristin Bennett, the NSRC Program Manager for CNMS, will serve as the Basic Energy Sciences point of contact for this review. I would appreciate receiving your committee's report within 60 days of the review's conclusion.

Patricia M. Dehmer
Associate Director of Science
for the Office of Basic Energy Sciences

cc:

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